A complete range of rugged solutions

The MilDef Group

Many specialties. One partner.
The MilDef Group brings together a complete range of rugged electronics expertise in one supplier. From compact computers to switches and monitors, MilDef has specialized experience in each of the key technologies needed for a powerful communications solution to perform in even the harshest conditions.

MilDef offer a comprehensive range of products that have been proven on land, at sea and in the air with international forces around the world. These products include high-performance modular computer systems, notebooks, PDAs, tablets, displays, power supplies and the groundbreaking 19”/2® form factor.

Since MilDef design and manufacture all of their products, the company is highly flexible in both enhancing standard products and designing custom solutions for specific needs.

Service and support anytime, anywhere MilDef’s presence spans the entire globe, either directly or through partners. This presence means MilDef can offer an unrivalled service and support package for rapid solutions any time they’re required.

The MilDef service offer includes:
- A dedicated in-house service team
- Guaranteed product servicing up to 5 years after end of sale
- Free telephone and email support for the lifetime of all products
- A standard 2-year warranty on all products, which can be extended if required
- Repair and return of a product within 10 working days of arrival
- An extensive burn-in program before delivery to ensure quality and function match all requirements.

MilDef Systems is the latest addition to the companies in the MilDef Group.
The core expertise of MilDef Systems AB is experience and knowledge of the military domain. Functional development, design and system integration of both communication and information systems have resulted in the creation of C4ISR. The MilDef Group product portfolio and associated competencies provides one of the pillars of the C4ISR. MilDef Systems’ business partners are responsible for the other elements such as communication systems, security solutions, software systems, platforms, etc.

Typical customers include Defence and Public Safety authorities.

Rugged computers

Maintain good communication in difficult conditions

Military operations often take place in difficult conditions: in the desert heat or arctic cold; in tropical rain or humid jungles; and in arid sandy plains. Not only must computer equipment withstand such tough conditions, but also the shocks and vibration common in military situations.

MilDef is well aware of what defence forces have to face in various theatres of operation, and is dedicated to developing and supplying a variety of rugged computers that help military personnel maintain good communication wherever they are.

An extensive range

We offer an extensive range of rugged computers and associated equipment as presented in this brochure. Most of the units are ideal for use by army, navy and air force personnel, although ground forces represent the biggest application area. MilDef units are found in ground vehicles such as tanks, armed personnel carriers and smaller road vehicles. They are also used in staff headquarters, field tents, and by all ground forces.

As we can satisfy virtually all of your computer equipment requirements, MilDef is the only contact that you need.

Mobile solutions

Maintaining high situational awareness and the tactical advantage in a combat zone are achieved with the help of MilDef products. For example, our Panther DB6 is a combat-rugged Ultra Mobile PC built for military applications in harsh conditions, such as BFT, BMS client, FAC* and use in military vehicles and naval vessels.

The PDA-size Panther DB6 is equipped with all the technology you need in such situations and can be customized to meet customer requirements. It has a sunlight-readable transflective LCD touch screen, and complies with several common standards, including MIL-STD-810G, MIL-STD-461F and IP65.

Customized units

As MilDef is a flexible company, we respond quickly to customer demands and are very service-minded. We can rapidly customize units to exacting standards and deliver them within tight time frames, even if it only concerns a few tailored products or hundreds of units. Computers can be modified and equipment connectors changed to suit your complete system. In addition, our accessories enhance the performance of our computer equipment. Naturally, they are designed for tight integration with our products.

As you would expect, our development department uses the latest technology in the design, development and manufacture of our product range and in customizing computers for our customers.

We have our own EMI chamber where we can test products and verify their performance after modification or upgrades.

Compliancy and Military Standards

As we are familiar with the extreme conditions under which military computer equipment operates, we use only the high-quality designs and materials necessary to protect and maintain long-term functionality and reliability. We are certified according to ISO 9001:2008 regarding design, development and production. We are also ISO 14001:2004 certified, and our care for the natural environment forms an important part of our business strategy.

All our units are built to comply with tough military standards to further ensure their high performance over long equipment lifecycles. They are minimum true IP54 products as well as fulfilling MIL-STD-810 and MIL-STD-461.

Sustainable products

A key consideration taken into account when designing new equipment is to make it sustainable and highly reliable. This satisfies the demand of defence equipment purchasers for the long-term stable supply of particular types of equipment. Such sustainability also matches the long lifecycles of most military vehicles and aircraft, and the need to continually update systems. Typical MilDef features that promote sustainability and cost-effectiveness are a form factor that remains the same even if computers are updated, a computer lifecycle of up to ten years, and lifetime support for all MilDef units.

Combat-rugged products to satisfy

Panther DF06

Specifications:
CPU: TI AM3715 1 GHz Cortex-A8
Display: 5" (480 × 800 pixel),
LED Backlight 300 NITS, Sunlight Readable,
Anti-Glare, Anti-Reflective Screen Treatments,
Capacitive Multi Touch Type
Memory: 512 MB RAM - 4 GB Flash ROM,
optional ROM 4-32 GB SSD
Operating System: WinCE 6.0
Sensors: magnetic, gravity, gyro, proximity and light
Temperatures: -20 to +50 °C (Operational),
-40 to +80 °C (Storage)
Dimensions: 90 × 170 × 20 mm (W × H × D)
Weight: 450 g
Compliant to: CE, FCC, WEEE, REACH, IP66, MIL-STD-810G,
MIL-STD-461F

Ports and connectors:
1 × Micro SD
1 × SIM Card
1 × DC-in

GPS
GSM/WWAN Quad band 3G Data
WiFi 802.11 b.g.n / BT v. 2.1
AF 5.0 MP Camera w LED Flash
1 × Sealed Audio (optional)
1 × FM SMA ANT (optional)
1 × GMS/WWAN SMA ANT (optional)
1 × WIFI (optional)
1 × Bluetooth SMA ANT (optional)
1 × GPS SMA ANT (optional)
1 × POGO Connector (optional)
Cradle (1 × RS232, 1 × RJ45 LAN 10/100,
3 × USB 2.0, 1 × USB and
1 × RGB)
Sealed DC-in 10~32V with BVA
- 36W (12V/3A) AC Adapter
Double capacity battery -
3.7V / 7040mAh Lithium-Ion battery
Resistive touch

Panther DB6-M

Specifications:
CPU: 1.6 GHz Intel Atom Z530 CPU,
512 KB L2 cache
Display: 5" (480 × 800) LED backlight,
300 NITS, sunlight-readable,
Resistive touch screen
Memory: 2 GB SDRAM (DDR2)
Operating System: Windows XP/7 and Linux
depending on configuration
Graphics: GMA 500 video controller
Storage: SSD up to 128 GB
Audio: Built-in speaker, volume key and audio codec
Temperatures: -20 to +50 °C (Operatinoal), -40 to +70 °C (Storage)
Dimensions: 94 × 200 × 36 mm (W × H × D)
Weight: 690 g with all RF modules and battery
Compliant to: CE, FCC, IP65, MIL-STD-810F and MIL-STD-461E

Ports and connectors:
1 × USB 2.0
1 × SD card
1 × SIM Card
1 × DC-in (built-in 12-32V DC)
1 × Cradle docking connector
(COM, GB LAN, 3 × USB 2.0
1 × USB client, 1 × RGB (DB15)

Options and accessories:
1 × Audio, Mic Sealed connector
1 × USB Sealed connector
WLAN (a/b/g/n)
Bluetooth 2.1 (EDR)
GPS (SMA antenna optional)
3G mobile broadband (SMA antenna
optional)
2.0MP camera, with LED flashlight
PCI-Express card slot
POGO expansion port
(GB LAN, USB, RS232, RGB)
Multi-battery charger
Fingerprint reader
Double capacity battery
-30 °C Operating Temperature

Panther DF7A

Specifications:
CPU: Qualcomm MSM8225Q Quad-Core
Cortex 1.2 GHz A5
Display: 5" (480 × 800 pixel),)
Sunlight-readable with
capacitive multi touch screen,
LED backlight 400~450 nits, optical bonding,
anti-glare, anti-reflective screen treatments
Memory: 1 GB LPDDR2 RAM
8GB ROM, Other sizes can be offered on request
Operating System: Android™ 4.1.2
Sensors: Magnetic, Gravity, Gyro, Proximity & Light
Temperatures: -20 to +55 °C. (Operational), -40 to +70 °C (Storage)
Dimensions: 90 × 169 × 23 mm (W × H × D)
Weight: 420 g – Depending on configuration
Compliant to: CE, FCC,WEEE, REACH, RoHS 2.0, IP66, MIL-STD-810G*
and MIL-STD-461F*, Explosive Atmosphere/Solar Radiation

Ports and connectors:
1 × Micro SD
1 × SIM Card
1 × DC-in

Options and accessories:
GPS
GSM/WWAN Quad band 3G Data
WiFi 802.11 b.g.n / BT v3.0
AF 5.0 MP Camera w LED Flash
1 × Sealed Audio (optional)
1 × FM SMA ANT (optional)
1 × GMS/WWAN SMA ANT (optional)
1 × WIFI (optional)
1 × Bluetooth SMA ANT (optional)
1 × GPS SMA ANT (optional)
1 × POGO Connector (optional)
Cradle (1 × RS232, 1 × RJ45 LAN 10/100,
3 × USB 2.0, 1 × USB and 1 × RGB)
Sealed DC-in 10~32V with BVA
- 36W (12V/3A) AC Adapter
Double capacity battery -
3.7V / 7040mAh Lithium-Ion battery
Resistive touch

Panther DR10

Specifications:
CPU: IntelR Core™ i7-2610UE
1.5 GHz - 2.4 GHz
Display: 8.4" LCD TFT, 1024 × 768,
480 NITS, sunlight readable,
Polarized resistive touch
Memory: RAM 4GB/8GB,
DDR3-1066/1333 MHz
Operating System: Windows 7/8
Graphics: Integrated IntelR HD Graphics 3000
Storage: Removable 2.5" SATA SSD/HDD 128 GB - 500 GB
Audio: HD-audio, built in stereo speakers
TPM: Trusted Platform Module 1.2
Temperatures: -20 to +50 °C (Operational), -40 to +70 °C (Storage)
Dimensions: 250 × 190 × 43 mm (W × D × H)
Weight: 1.9 kg (depending on configuration)
Compliant to: CE, FCC, IP54 (without protection caps),
MIL-STD-810G and MIL-STD-461F (Ground Army optional),
WHQL (Win 7), WEEE, REACH

Ports and connectors:
1 × MIL DC in 12-32V with surge
protector
2 × USB 2.0
1 × RS232/422/485
1 × RJ45 GigaLAN
1 × ExpressCard Slot
(ExpressCard/54)
1 × SIM & SD Card Slot
1 × 120 pin dock connector

Options and accessories:
ViaSat Eclypt Self encrypting SSD
GPS
Adjustable stand
WLAN a/b/g/n
GSM/GPRS, HSDPA
BMS Docking station (described in
Accessories page)
Holder for vehicle mounting
DockLite Docking list (several
options available)
Bluetooth 4.0 (BLE)
Modem v.90
Extra RS232/422/485
12-32V Vehicle adapter
-30 °C Operating Temperature

most needs

Panther DK10

Specifications:
CPU: Intel Sandy Bridge i7-2610UE
Display: 12.1" LCD TFT, 1024 × 768, B/L 350 NITS,
Resistive single-touch panel,
Anti-Reflective and Sunlight readable
Memory: RAM Max. 8 GB,
DDR 3 1333 MHz
Operating System: Windows 7/8
Graphics: Intel HD Graphics 3000
Storage: Removable 120 GB – 500 GB SATA HDD/SSD
Audio: HD Audio and stereo speakers
Temperatures: -20 °C to +50 °C (Operational),
-40 to +70 °C (Storage)
Dimensions: 310 × 255 × 54 mm (W × D × H)
Weight: 2.5 kg
Compliant to: CE, FCC, WEEE, REACH, WHQL (WIN8),
IP65, MIL-STD-810G and MIL-STD-461F

Ports and connectors:
1 × MIL DC in 12-32V
1 × Serial (RS232/422/485)
1 × RF device switch
1 × USB 2.0
1 × USB 3.0
1 × RJ45 GigaLAN
1 × Express card slot
1 × SIM & SD Card Slot

Options and accessories:
ViaSat Eclypt Self encrypting SSD
GPS
HSDPA/3G
Bluetooth 4.0 (BLE)
WLAN a/g/n
DockLite Docking list (several options available)
Stand for vehicle mounting
Secondary battery (7200 mAH Lithium-Ion rechargeable)
-30 °C Operating Temperature

Panther DT10

Specifications:
CPU: Intel Sandy Bridge i7-2610UE
Display: 9" 1280 x 768 TFT LCD,
LED B/L 800 nits,
Resistive single-touch panel polarized,
Anti-Glare and Anti-Reflective
Memory: Max. 8 GB, DDR 3 1333 MHz
Operating System: Windows 7/8
Graphics: Intel HD Graphics 3000
Storage: Removable 120 GB – 500 GB SATA HDD / SSD
Keyboard: 62 keys with LED backlight
Temperatures: -20 °C to 50 °C (Operational),
-40 °C to +70 °C (Storage)
Dimensions: 250 x 190 x 42.5 mm (W x D x H)
Weight: ~1.9 kg
Compliant to: CE, FCC, WEEE, REACH. WHQL, IP54, RoHS 2.0,
MIL-STD-810G, MIL-STD-461F

Ports and connectors:
1 × DC in 12-32V 1 × Serial RS232/422/485, selectable in BIOS
2 × USB 2.0
1 × RJ45 Giga LAN
1 × Multibay with PCMCIA (3.3V/5V) and ExpressCard Slot
1 × Docking-connector (120 pins)
2nd battery connector

Options and accessories:
ViaSat Eclypt Self encrypting SSD
2.5" Solid State Drive 80-500 GB
Removable 2.5" Drive
SSD and HDD options available
GPS, Bluetooth
WLAN a/b/g/n
Docklite 10Extra RS232/422/485
Stand for vehicle mounting
Secondary battery (11.1V/7200 mAH Lithium-Ion rechargeable)
Optional Night vision On/Off – Adjustable brightness down to 0
-30 °C to 50 °C Operating Temperature

Rocky RS11

Specifications:
CPU: Intel Core i7-3517UE
1.7 – 2.8 GHz
Display: LED backlit 13.3"
(1600 × 900), sunlight readable
Memory: RAM Max 8 GB DDR3 1600 MHz
Operating System: Windows 7/8
Graphics: Intel HD Graphics 4000
Storage: 120 GB - 500 GB SATA III SSD (removable)
Input devices: Backlit Keyboard, capacitive touchpad multi-touch, works with gloves (Win8 compatible)
Audio: HD Audio and stereo speakers, embedded mic
Temperatures: -20 °C to +55 °C (Operational),
-40 °C to +70 °C (Storage)
Dimensions: 330 × 246 × 24 mm (W × D × H, w/o rubber bumpers)
Weight: 2.5 kg
Compliant to: CE, FCC, WEEE, REACH, IP65 (without rubber caps), MIL-STD-810G and MIL-STD-461F, WHCK

Ports and connectors:
1 × SD Card Slot (supports SDHC/SDXC)
1 × SIM Card Slot
1 × USB 3.0 (USB-IF BC V1.2 for 1.5A fast charger)
1 × USB 3.0
1 × GigaLAN RJ45
1 × MIL DC 12-32V

Options and accessories:
ViaSat Eclypt Self encrypting SSD
GPS
1 × 2nd RJ45 GigaLAN
1 × MIL LAN Fischer
1 × MIL VGA Fischer
1-4 × MIL COM Fischer
1 × MIL Audio Fischer
1 × MIL USB Fischer
WLAN 802.11 a /g/n
Bluetooth 4.0 (BLE),
WWAN HSDPA
1 × Mini HDMI
1 × POGO dock port
Night Vision
-30 °C Operating Temperature
1000NIT high brightness display
Ground Navy

Rocky RV11

Specifications:
CPU: Intel Core i7-3517UE
1.7 – 2.8 GHz
Display: LED backlit 15.6"Widescreen (1920 × 1080), optical bonding
Memory: RAM Max 8 GB DDR3 1600 MHz
Operating System: Windows 7/8
Graphics: Intel HD Graphics 4000
Storage: 120 GB - 500 GB SATA III SSD (removable)
Input devices: Backlit Keyboard, capacitive touchpad multi-touch, works with gloves (Win8 compatible)
Audio: HD Audio and stereo speakers, embedded mic
Temperatures: -20 °C to +55 °C (Operational),
-40 °C to +70 °C (Storage)
Dimensions: 382 × 295 × 25 mm (W × D × H, w/o rubber bumpers)
Weight: ~3.7 kg Depending on configuration
Compliant to: CE, FCC, WEEE, REACH, IP65 (without rubber caps), MIL-STD-810G and MIL-STD-461F, WHCK, RoHS2.0, Explosive Atmosphere/Solar Radiation Test

Ports and connectors:
1 × SD Card Slot (supports SDHC/SDXC)
1 × SIM Card Slot
1 × USB 3.0 (USB-IF BC V1.2 for 1.5A fast charger)
1 × USB 3.0
1 × GigaLAN RJ45
1 × MIL DC 12-32V

Options and accessories:
Viasat Eclypt Self encrypting SSD
1 × 2nd LAN RJ45 (GigaLAN)
1 × MIL LAN
1 × MIL VGA
1-2 × MIL COM
1 × MIL Audio
1 × MIL USB
GPS
WLAN 802.11 a/b/g/n,
Bluetooth 4.0 (BLE),
WWAN HSPA 3G
1 × Mini HDMI
1 × POGO dock port
-30 °C Operating Temperature
1000NIT high brightness display
Nightvision
Ground Navy

Rocky RK10

Specifications:
CPU: Intel Sandy Bridge i7-2610UE
Display: 15" (1400 × 1050),
LED Backlight 500 nits,
Sunlight readable
Memory: RAM Max 16 GB
DDR3 1333 MHz
Operating System: Windows 7/8
Graphics: Intel HD Graphics 3000
Storage: 120 GB – 500 GB SATA HDD / SSD
Input devices: Resistive touchpad
Audio: HD Audio and Stereo Speakers
Temperatures: -20 °C to +50 °C (Operational),
-40 to +70 °C (Storage)
Dimensions: 339.6 × 293.5 × 63.7 mm
(W × D × H, with rubber bumpers)
Weight: 5.6 kg (depending on configuration)
Compliant to: CE, FCC, WHQL, WEEE, REACH,
IP65 (without protection caps),
MIL-STD-810G and MIL-STD-461F

Ports and connectors:
1 × Flex Bay (2nd HDD/
DVD/Battery)
1 × PS/2
1 × IEEE1394a (Firewire)
2 × USB 3.0
1 × USB 2.0
(USB fast charge)
3 × 3.5mm
(Mic, Line-in/earphone)
1 × RJ45 GigaLAN
1 × Express card (PCIe)
2 × RS232/422/485
1 × MIL DC in
1 × DVI
1 × RGB DB15
1 × Printer Port DB12

Options and accessories:
ViaSat Eclypt Self encrypting SSD
GPS
Removable 3.5" DVD-RW 2nd SATA
1024 x 768
HDD with heater or secondary battery.
Flexbay with DC, PCIe, USB, LAN,
SATA and serial signals for customer
specific modules
WLAN 802.11 a/b/g/n,
Bluetooth 4.0(BLE),
HSDPA/3G,
1 × PCMCIA II
2 × MIL Connector upgrade for
RS232/422/485 etc.
External COM3/4 RS232/422/485)
100 or 1000 base fibre LAN in LC ,
HMC or HMA connector.
DockUnder-Office (2 × RS232, 2 × USB,
1 × LAN, 1 × PS/2, 1 × DVI, 1 × RGB)
Built in vehicle adapter (12-32V DC)
Secondary battery 11.1V 8700 mAh
Surge protection MIL-STD-1275B for
DC in
NVIDIA GeForce GT520
Touch screen (resistive),
sunlight readable
89-keys backlit keyboard,
MIL-STD-461F - Ground Navy

Rocky RF10

Specifications:
CPU: Intel Sandy Bridge i7-2610UE
Display: 17.1 " (1440 × 900),
LED Backlight 500 nits,
sunlight readable
Memory: RAM Max 16 GB
DDR3 1333 MHz
Operating System: Windows 7/8
Graphics: Intel HD Graphics 3000
Storage: 160 GB – 500 GB SATA HDD / SSD
Input devices: 87-Keyboard, Resistive touch pad
Audio: HD Audio and Stereo Speakers
Temperatures: -20 °C to +55 °C (Operational),
-40 to +70 °C (Storage)
Dimensions: 412.4 × 318.2 × 77 mm
(W × D × H, with rubber bumpers)
Weight: 5.9 kg (depending on configuration)
Compliant to: CE, FCC, WEEE, REACH, WHQL,
IP65 (without protection caps),
MIL-STD-810G and MIL-STD-461F

Ports and connectors:
1 × Flex Bay
(HDD/DVD/Batt etc)
1 × PS/2
2 × USB 3.0
1 × USB 2.0 fast charge
1 × IEEE1394a (Firewire)
1 × RJ45 GigaLAN
3 × 3.5mm
(Mic,Line-in/earphone)
1 × PCIe slot
2 × RS232/422/485
1 × DC
1 × RGB DB15
1 × DVI
1 × Printer Port DB12

Options and accessories:
ViaSat Eclypt Self encrypting SSD
GPS
NVIDIA GeForce GT520M
1680 × 1050
MIL-STD-461F - Ground Navy
Removable 3.5" DVD-RW,
2nd SATA HDD with heater or second-
ary battery. Flexbay with DC, PCIe,
USB, LAN, SATA and serial signals for
customer specific modules.
10/100/1000Mbit LAN RJ45
WLAN 802.11 a/b/g/n
Bluetooth v4.0 (BLE)
HSDPA, 3G
2 × MIL Connector upgrade for
RS232/422/485 etc.
COM3/4 RS232/422/485
100 base FX fibre LAN (LC, Mini PCI)
Built in vehicle adapter
(12-32V DC in)
Mil connector upgrade for DC
Secondary battery 11.1V 7200 mAH
Lithium- Ion
Surge protection MIL-STD-1275B for
DC in
Night Vision
89-keys backlit keyboard,

Mobilite 5

Specifications:
CPU: Intel Sandy Bridge i7-2610UE
Memory: RAM Max. 8 GB,
DDR3 1333 MHz
Operating System: Windows XP/7 and
Linux depending on configuration
Graphics: Intel HD Graphics 3000
Storage: Removable 120-500GB
SATA HDD/SSD
Temperatures: -20 °C to +50 °C (Operational),
-40 °C to +70 °C (Storage)
Dimensions: 250 × 190 × 43 mm (W × H × D)
Weight: 1.9 kg
Compliant to: CE, FCC, WEEE, REACH,
IP65, MIL-STD-810G and MIL-STD-461F

Ports and connectors:
1 × DC in 12-32V
1 × Serial (RS232/422/485)
1 × USB 3.0 with fast charger
1 × USB 3.0
1 × GigaLAN RJ45
1 × Multibay (ExpressCard Slot +
SIM card slot + SD Card slot)
1 × 120 pins docking connector
2nd battery connector

Options and accessories:
2.5 SSD 80-500 GB
GPS
HSDPA/3G
Bluetooth 4.0 (BLE)
WLAN a/b/g/n
Docklite docking station
Extra RS232/422/485
Stand for vehicle mounting
Secondary battery
(11.1V/7200 mAH Lithium-Ion
rechargeable)

Accessories

Here you'll find a selection of accessories to compliment your MilDef computer. Please contact your local MilDef office to discuss your needs and requirements.

Flex Bay

Available for all Rocky 9/10-series notebooks (RT, RK and RF)

Specifications:
2 × Gbit LAN
2 × COM-ports
1 × Full RS232/RS485
1 × Tx / Rx
USB
PCIe
SATA
Power in/out
2nd HDD/SSD: SATA & Heater
2nd Batery: 7200 mAH Lithium Ion
DVD±RW: 3.5" CD/DVD SATA

IP54 Keyboard

Specifications:
89 key layout (emulates 101 /102 keys)
Windows keys, Elastomer keys (backlight)
Operating force: 60 +/- 20 g
Full travel: 2 mm
Life: > 1 million times
Weight: 1.2 Kg, 1.7 kg with rubber plate (option)
Size of the key caps part: 275 × 100 mm
Size of the keyboard: 325 × 172 mm (W × D)
Designed to meet: IP54, MIL-STD-461D (option)
Temp operating: -20 to +50 °C
Temp storage: -30 to +70 °C

KBD-MINI

Specifications:
Built in trackpoint, left/right click
Backligh ON/OFFUSB connection, Type A,
Aluminium chassis
Designed to meet: IP54,MIL-STD-810F,
MIL-STD-461E, RE102
Temp operating: -40 to +55 °C
Temp storage: -40 to +70 °C
Dimensions: 220 × 25 ×
180 mm (W × D × H)
Weight: 0.8 kg

DB6 Mini KBD

Specifications:
USB, 66 keys, backlight, right/left click,
stickpointer, Magnesium
Designed to meet: IP54
Certifications: CE/FCC
Temp operating: -20 to +50°C
Temp storage: -40 to +70°C
Dimensions: 190 × 90 × 12 mm (W × D × H)
Weight: 170 g

Shortcut Keyboard KBD101

Specifications:
USB, 4x4 Keyboard with integrated
LCD displays
RGB backlight in each button.
LCD display in each button.
Compliant to: IP64
Temp operating: -20 to +55 °C
Temp storage: -40 to +71 °C
Dimensions: 110 × 136 × 30 mm (W × D × H)
Weight: < 0.7 kg

Adjustable stand

Specifications:
Stand for our Panther DR886/DR10
Adjustable in all directions.
The joint consists of a rubber ball,
which acts as a vibration damper.
Dimensions: 244 × 312 × 165 mm
(W × H × D)
Weight: 2.3 kg

19”/6 MC701 Media converter

Specifications:
Converts between Ethernet copper and fiber (Minic Tyco connector)
Also available with LC connector
Temp operating: -40 to +55 °C
Temp storage: -40 to +70 °C
Dimensions: 73 × 140 × 44 mm (W × H × D)
Ports: 1 x LAN RJ45 (1000 Mbps*)
1 × LAN Fiber MiniTyco, Single Mode (1000Mbps, 1310 nm)
1 × DC In 5V (Binder)
1 × DC In 10-32V DC (ITS)

* can be configured to 10/100/1000 Mbps

DockLite Standard
(option for DK, DR and DT)

Connections:
1 × RJ45 GigaLAN
2 × USB 2.0
2 × Sealed MIL USB 2.0
1 × VGA (DB15)
2 × RS232(DB9)
1 × MIL DC in with surge protection
1 × Audio Out
1 × Mic

Ethernet Media converter

Specifications:
Converts between Ethernet 10BaseT/100BaseTx “twisted pair” and fiber (SC or ST connector).
Multimode fiber: 50/125 µm or 62.5/125 µm, -14 dBm, 1300 nm, LED
Power consumption: max 500 mA (28V)
Dimensions: 147 × 64 × 41 mm (W × D × H)
Weight: 325 g
Ports: Duplex SC or ST 820 nm or 1300 nm (for 50 or 62.5 µm fiber)
10BaseT/100BaseTx RJ45 connector
10-32 V DC Input with MIL connector
Temp operating: -20 to +50 °C
Temp storage: -40 to +70 °C
MIL-STD-461E, RE 102

DockLite Fiber
(option for DK, DR and DT)

Connections:
1 × 100Mbit 1310 nm MultiMode LC
2 × USB 2.0
2 × Sealed MIL USB 2.0
1 × VGA (DB15)
2 × RS232 (DB9)
1 × MIL DC In with surge protection
1 × Audio Out
1 × Mic

Media converter 6

Specifications:
Converts between Ethernet 10BaseT/100 BaseTx “twisted pair” and fiber (SC or ST connector).
Temp operating: -20 to +50 °C
Temp storage: -40 to +70 °C
Dimensions: 80 × 38 × 23 mm (W × H × D)
Ports: Duplex SC or ST 820 nm or 1300 nm (for 50 or 62,5 µm fiber) 10BaseT/100BaseTx RJ45 connector 5V DC in (cable for USB port included)

BMS Docking station

Specifications:
Docking station for DR886/DR10
Signals:
1 × COM2 (RS232)
1 × COM3 (RS232)
1 × VGA
1 × Video
1 × GPS-Antenna (optional)
1 × USB
1 × COM4 = USB > RS232
1 × GPS (Military or Industrial)
1 × LAN/FiberLAN
5V out
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461E and MIL-STD-1275 1 × DC
Dimensions: 250 × 80 × 216 mm

19”/2® Product range

Save up to 75% of space or add more functionality

Our innovative approach to product design can be seen with our new modular 19”/2® units. The halved dimensions compared with the existing 19” form factor means that we create up to 75% more space in racks, which can be used to mount more units and hence more functionality. Smaller units are particularly valuable for use in cramped spaces, such as found in ground vehicles and aircraft.

This is a perfect example of where we are truly reshaping your communication power.

Endless configuration possibilities

The ability to readily combine communication units of the 19” form factor with units of MilDef’s 19”/2® form factor gives the practical benefits of integrated solutions and endless configuration possibilities to quickly build the communication system you want.

More important benefits

The smaller size of our 19”/2® modules provides you with the additional important benefits of:

- Less weight
- Less energy consumption
- Less heat generation

Sustainable form factor

A key consideration taken into account when designing our 19”/2® form factor was to make it sustainable. This satisfies the demand of defence equipment purchasers for the long-term stable supply of particular types of equipment. Such sustainability also matches the long lifecycles of most military vehicles and aircraft, and the need to continually update systems.

Moreover, we assure you of lifetime support for all MilDef equipment.

Typical application segments

The various communication units of the MilDef 19”/2® product series are typically used within the following military segments:

- Ground vehicles
- Deployed forces
- Special forces
- Air force
- Navy

Customized units or special electronics

Our 19”/2® communication units are supplied as military off-the-shelf (MOTS) products, but MilDef can complement these with our hardware according to customer specifications. In addition, 19”/2® units can be created as special electronics in our own development department. These result from customers approach-ingus to see whether we can build special electronic units based on specifications that suit their particular needs, and which are not available as MOTS products or modifications of these.

19” rack installation

Two or more modules can be stacked on top of each other

Two modules can be mounted together in a 19” rack

The possibilities are endless

Stand-alone installation

Extensive module range to satisfy

19”/2 Server i7 MIL – CS300 series

A rugged server based on the Intel Ivy Bridge platform.
Intel Core i7- 3615QE (Max 3.3 GHz), Maximum 16 GB RAM DDR3
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 x 332 x 88 mm, **Weight**: ≤ 6.5 kg

Connections on front:
1 × DC in 10-32V
2 × Removable RAID disks
1 × Removable USB backup disk
3 × 38999 with following interfaces:*
1 × DVI
1 × VGA
4 × LAN 10/100/1000 Mbps
1 × RS232 (without RI)
3 × RS232 (only RX, TX)
2 × USB 2.0
1 × Mic (mono)
1 × Audio Out

Connections on back:
1 × Service port

*Avalible in different configurations, incl. with HMC fiber LAN

19”/2 Server i7 – CS350 series

A rugged server based on the Intel Ivy Bridge platform.
Intel Core i7- 3615QE (Max 3.3 GHz), Maximum 16 GB RAM DDR3
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 x 332 x 88 mm, **Weight**: ≤ 6.5 kg

Connections on front:
1 × VGA
2 × Removable RAID disks
1 × Removable USB backup disk
4 × USB 2.0
2 × LAN RJ45 10/100/1000Mbps
1 × RS232
1 × DC in 10-32V

Connections on back:
1 × LAN Fiber LC Single Mode (1000Mbps, 1310nm)
2 × USB 2.0
1 × eSATA
1 × Service port

19”/2 Computer i7 MIL – CS220 series

A rugged computer based on the Intel Core i7 platform.
Intel Core i7- 3517UE (Max 2,8 GHz), Max. 16 GB RAM DDR3 (2 slots)
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 350 × 44 mm, **Weight**: 4 kg

Connections on front:
1 × DC in, 10-32V
1 × SATA (38999)
3 × 38999 with following interfaces:
2 × RS232/422/485
1 × Mic (Mono)
1 × Audio out
2 × USB
1 × DVI
1 × VGA

Additional options:
4 × LAN 10/100/1000 Mbps
2 × USB or RS232/422/485 or CAN 2.0
1 × DVI (trade of with the VGA)
1 × VGA (trade of with the DV1)

19”/2 Computer i7 – CS210 series

A rugged computer based on the Intel Core i7 platform.
Intel Core i7- 3517UE (Max 2,8 GHz), Max. 16 GB RAM DDR3 (2 slots)
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 x 391 x 44 mm, **Weight**: ≤ 4 kg

Connections on front:
1 × VGA
1 × RS232
1 × RJ45 10/100/1000Mbps
1 × LAN Fiber LC Single Mode (1000Mbps, 1310nm)
3 × USB 2.0
1 × DC in 10-32V

Connections on back:
1 × Service port

19"/2 Computer i7 – CS250 series

A rugged computer based on the Intel Core i7 platform.
Intel Core i7- 3517UE (Max 2,8 GHz), Max. 16 GB RAM DDR3 (2 slots)
Designed to meet: : IP54, MIL-STD-810F and 810G, MIL-STD-461E and MIL-STD-1275D
Temp operating: -40 to +60 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 400 × 44 mm, **Weight**: ≤ 3.7 kg

Connections on front:
1 × DVI
1 × RJ45 10/100/1000Mbps
3 × USB 2.0
1 × DC in 10-32V
1 × Removable disk

Connections on back:
1 × Service port

19”/2 Computer Atom – CS400 series

A rugged compact and power efficient computer, based on an Intel Atom dual core CPU.
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 292 × 44 mm, **Weight**: 3 kg

Connections on front:
1 × DC in 10-32V*
1 × VGA
4 × LAN 10/100/1000 Mbps
1 × Console USB
1 x Console Serial (RJ45)
4 × USB 2.0

Connections on back:
1 × Service port

most needs

19″/2 Computer i7 MIL – CS330 series

A rugged computer based on the Intel Ivy Bridge platform.
Intel Core i7- 3615QE (Max 3.3 GHz), Maximum 16 GB RAM DDR3
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 x 461 x 88 mm, Weight: ≤ 7 kg

Connections on front:
1 × DVI (38999)
1 × DVI clone (38999)
3 × RS232 clone (sniff) (38999)
1 × RS423 clone (sniff) (38999)
3 × RS232 (38999)
1 × RS422 (38999)
1 × RS423 (synchronous) (38999)
3 × USB 2.0 (38999)
3 × LAN Gbit (MightyMouse)
1 × LAN IPMI (MightyMouse)
2 x USB 2.0 (MightyMouse)

Connections on back:
1 × RS232 console (MightyMouse)
2 × Audio out (L + R) (MightyMouse)
1 × Service port (Binder)
External Fan support (Binder)
1 × DC-in 20.5-32.2 V

19″/2 Storage Computer – ST300 series

A rugged storage computer based on the Intel Ivy Bridge platform.
Intel Core i7- 3517UE (Max 2.8 GHz), Maximum 16 GB RAM DDR3
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 420 × 88 mm, Weight: ≤ 9 kg

Connections on front:
6 × Removable SATA HDD (rotating or SSD)

Connections on back:
1 × DC-in 20.5-32.2V
2 × LAN 10 Gbit fiber (Mini Tyco)
1 × Service port (Binder)
1 × LAN IPMI copper (MightyMouse)
2 × LAN Gbit copper (MightyMouse)
1 × Serial console (MightyMouse)
1 × eSATA interface (I/O)
2 × USB 2.0 (38999)
1 × VGA (38999)

19″/2 RAID – ST400 series

A rugged raid storage in a 19″/2 format.
Supports RAID 0, 1, 3, 5, 10, JBOD, CLONE
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, **Temp storage:** -40 to +70 °C
Dimensions: 220 × 420 × 88 mm, **Weight:** ≤ 6 kg

Connections on front:
5 × Removable SATA HDD (rotating or SSD)
1 × DC-in 10-32V

Connections on back:
1 × Service port (Binder)
1 × eSATA interface (I/O)

19″/2 KVM Switch – KSW400 Series

6 port VGA and USB KVM switch with daisy chain expandability up to 18 ports.
Designed to meet: IP54 MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 180 × 44 mm, **Weight**: ≤ 3 kg

Connections on front:
1 × VGA
1 × Service Port

Connections on back:
6 × Link Port
1 × Link in
1 × Link out

19″/2 KVM Switch – KSW500 series

2 port DVI and USB KVM switch
Designed to meet: IP54 MIL-STD-810G, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, **Temp storage**: -40 to +70 °C
Dimensions: 220 × 190 × 43 mm, **Weight**: ≤ 1.7 kg

Connections on front:
1 × DC in, 12-32V (ITS)
2 × DVI single link (38999)
6 × USB 2.0 (38999)

Connections on back:
1 × DVI single link (38999) (Console)
3 × USB 2.0 (38999) (Console)
1 × connector (38999) (for connection to the remote selector)
1 × Service port (Binder)

19″/2 LANTIME R100/MRS – SSW500 series

Based on the Meinberg MRS170 card.
Designed to meet: IP54, MIL-STD-810F & MIL-STD-461F
Temp operating: 0 °C to +55 °C, Temp Storage: -40 °C to +70 °C
Dimensions: 220 × 366 × 44 mm, **Weight**: 3.5 kg

Connections on front:
1 × Console serial (RJ45)
1 × LAN RJ45 (10/100 Mbps)
1 × Console (USB)
1 × Host USB
1 × Antenna
1 × PPS out
1 × PPS input
1 × NMEA (RS232)
1 × DC in, 10-32V

Connections on back:
1 × Service port

19”/2 AC/DC – PWR100 series

An AC/DC Adapter built into a 19”/2 chassis. Provide 28V DC at maximum 9 A (in total) within the range of 110/220V AC.
Designed to meet: IP54, MIL-STD-810F & MIL-STD-461F
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 202 × 44 mm, **Weight**: 3 kg

Connections on front:
1 × AC in, 110/220V AC (50-60 Hz)
2 × DC out, 28V

Connections on back:
1 × Service port

19”/2 Power Panel – PWR300 series

Max output 10 A/channel. Max 20 A total.
Indication for each DC out.
Designed to meet: IP54, MIL-STD-810F & MIL-STD-461F
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 182 × 44 mm, **Weight**: 1.5 kg

Connections on front:
1 × DC in, 10-32V
6 × DC out
Custom connectors available

19”/2 UPS – PWR200 series

Litium-Ion Battery, Capacity 2.2 Ah. Battery status Indication. Suitable for 12V and 24V systems. Indication for external power.
Designed to meet: IP54, MIL-STD-810F & MIL-STD-461F
Temp operating: -20 to +55 °C, Temp storage: -30 to +55 °C
Dimensions: 220 × 182 × 44 mm, **Weight**: 2.5 kg

Connections on front:
1 × DC in, 10-32V
1 × DC out
(12V/20 A or 24V/10 A)

Connections on back:
1 × Console port for communication with host computer (DB9)
Battery: 2 × 4 cells Lithium-Ion

19”/2 8-port Switch PoE – ESW300 series

Unmanaged layer 2 switch
Power over Ethernet on all ports available as option (48 V, max output 12.8 W per channel).
Designed to meet: IP54, MIL-STD-810F & MIL-STD-461F
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 182 × 44 mm, **Weight**: 2.5 kg

Connections on front:
8 × LAN RJ45 (10/100 Mbps)
1 × DC in, 10-32V

19”/2 RS232/422/485 Switch MIL – SSW200 Series

Share serial devices in an IP-network. Individual IP addressing to each serial port. Software switchable between RS232, RS422 and RS485.
Designed to meet: IP54, MIL-STD-810F & MIL-STD-461F
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 182 × 44 mm, **Weight**: 2 kg

Connections on front:
6 × Serial port (Amphenol PT02-series)*
1 × LAN RJ45 (38999) *
1 × DC in, 10-32V

* Avaible with serveral different type of connectors

19"/2 18-port Switch - ESW430 series

Managed layer 3 switch with static routing
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F & MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 270 × 44.2 mm, **Weight**: ≤ 2.5kg

Connections on front:
10 × LAN MightyMouse (10/100/1000 Mbps)
1 × Console Serial

Connections on back:
6 × LAN MightyMouse (10/100/1000 Mbps)*
2 × LAN Fiber MiniTyco, Single Mode (10Gbps, 1310 nm)
1 × Service port (Binder)
1 × DC in, 12-32V (ITS)

* Avaible with serveral different type of connectors

19"/2 17-port Switch - ESW440 series

Managed layer 3 switch with static routing
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F & MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 270 × 44.2 mm, **Weight**: ≤ 2.5 kg

Connections on front:
9 × LAN RJ45 (10/100/1000 Mbps)
1 × Console Serial

Connections on back:
6 × LAN RJ45(10/100/1000 Mbps)
2 × LAN Fiber MiniTyco, Single Mode (10Gbps, 1310 nm)
1 × Service port (Binder)
1 × DC in, 12-32V (ITS)

19"/2 16-port Switch - ESW400 series

Managed layer 2 switch
Designed to meet: IP54, MIL-STD-810F & MIL-STD-461F
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 182 × 44 mm, **Weight**: 2 kg

Connections on front:
8 × LAN 38999 (4 connectors)* (10/100/1000 Mbps)
1 × DC in, 10-32V

Connections on back:
8 × LAN 38999 (4 connectors)* (10/100/1000 Mbps)
1 × Console port

* Avaible with serveral different type of connectors

19"/2 Cisco Switch - ESW500 series

Layer 3 switch based on the Cisco 3560 Switch.
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F & MIL-STD-1275D
Temp operating: -20 to 55 °C*, Temp Storage: -40 to 55 °C
Dimensions: 220 × 400 × 44 mm, **Weight**: 4 kg

Connections on front:
6 × LAN RJ45 (10/100/1000 Mbps)
2 × LAN Fiber Singel mode (1000 Mbps, 1310 nm)
1 × Console (USB)
1 × DC in, 10-32V

Connections on back:
2 × LAN RJ45 (10/100/1000 Mbps)
1 × Console serial (RJ45)
1 × Service port

* Optional -40 °C

19"/2 Cisco Router – RM200 series

Fully rugged router based on the Cisco 5915 ESR card.
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 182 × 44 mm, **Weight**: 2 kg

Connections on front:
2 × WAN RJ45 (10/100 Mbps)
3 × LAN RJ45 (10/100 Mbps)
1 × Console serial
1 × Console USB
2 × USB Power cut 5V
1 × DC in, 10-32V

Connections on back:
1 × Service port

19"/2 Cisco Router – RM210 series

Fully rugged router based on the Cisco 5915 ESR card.
Designed to meet: IIP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40 to +71 °C, Temp storage: -40 to +71 °C
Dimensions: 220 × 202 × 44 mm, **Weight**: 4 kg

Connections on front:
2 × WAN (10/100 Mbps)
3 × LAN (10/100 Mbps)
1 × Cisco Console interface
1 × DC in, 10-32V (ITT)

Connections on back:
1 × Service port

19"/2 8-port VoIP Router – RM500 series

VoIP Router with 8 analogue ports. Supports SIP, H.323 & T.38 standards.
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -40°C to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 182 × 44 mm, **Weight**: 2 kg

Connections on front:
1 × LAN (RJ45)
8 × Voice Port (RJ11)
2 × USB Power out 5V
1 × DC in 10-32V

Connections on back:
1 × Service port

Special electronics

MilDef can offer our customers complete realization of any product idea or concept. Our creative, experienced and well-motivated personnel understand what is required to convert a customer's idea into a finished product – keeping cost, quality and time in full focus.

Below are examples of custom special electronics, all of which were tailored for customers' specific requirements and needs.

19" LCD/KBD – DS200 Series

Specifications:
A rugged 15.1" LCD/KBD, VGA 1440 x 1051, LED Backlight, sunlight readable LCD
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -20 to +55 °C, Temp storage: -40 to +70 °C
Dimensions: 440 × 400 × 44 mm, Weight: 10,3 kg

Connections on back:
1 × VGA
1 × USB(B) Keyboard output
1 × USB(B) Mouse output
1 × Service port (binder)
1 × DC In 10-32 V (ITS)

Panel PC Atom – CS500 series

Specifications:
A rugged panel PC based on the Intel Cedarview platform.
Intel Atom N2600 (Max 1.6 GHz), Maximum 2 GB RAM DDR3,
8,4" LCD with 500 nits, LED backlight, dimmable down to
0% Resistive touch
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461F and MIL-STD-1275D
Temp operating: -30 to +55 °C, Temp storage: -30 to +70 °C
Dimensions: 216 x 191 x 65 mm, Weight: ≤ 3 kg

Connections on front:
2 × USB 2.0 (Mighty Mouse)
2 × System buttons

Connections on back:
1 × LAN 10/100/1000 Mbps (RJ45)
1 × Console serial (RJ45)
1 × USB 2.0
1 × Service port (Binder)
1 × DC In, 10-32V

19"/2 TCE621/M Thales Frame

A rugged mount for the Thales
TCE621/M crypto designed specifically for 19"/2 mounting
Designed to meet: IP54, MIL-STD-810F
Temp operating: -40 to +55 °C, **Temp storage**: -40 to +70 °C
Dimensions: 220 × 245 × 43 mm, **Weight**: 2.5 kg

Connections on front:
Space to mount 1 × Thales TCE621/M
Crypto

19"/2 Sat Router – SRM200 series

The Satellite Router is based on the iDirect iCONNEX e850mp Satellite Router card
Designed to meet: IP54,
Temp operating: -20 to +50 °C, Temp storage: -40 to +70 °C
Dimensions: 220 × 360 × 44 mm

Connections on front:
1 x RX (N-Type)
1 x Tx (N-Type)
1 x Rx simple (N-Type)
1 x GPS (N-Type)
1 x LAN (Mighty Mouse)
1 x DC In, 10-32 V (ITS connector)

Connections on back:
1 x Console port (Mighty mouse)

Rugged Displays

Forged in the thick of battle

Every MilDef RD display was inspired by action in the field. Each design was developed in cooperation with armed forces to meet the ongoing communication challenges of their armoured vehicles and command posts. The range we have today is the culmination of 10 years of such in-depth collaboration.

We push display technology forward by finding the critical areas of improvement as revealed by on the ground use. That's why MilDef displays are not only some of the toughest on the market, but adapted to the finer points of military operations like the need for stealth, to save space in tight quarters and to be easily integrated with other equipment.

Today, the RD range is a staple of military operations with thousands in use by armed forces around the world.

Performance where it matters most

You can count on our RD displays even in the harshest conditions. They are combat proven to withstand severe shocks, function in extreme temperatures and to be moisture resistant. We build them according to MIL-STD-810 and MIL-STD-461 and put them through an extensive burn-in program before they leave our facilities to guarantee each unit can take everything that's thrown at it.

Hi-res and multifunctional

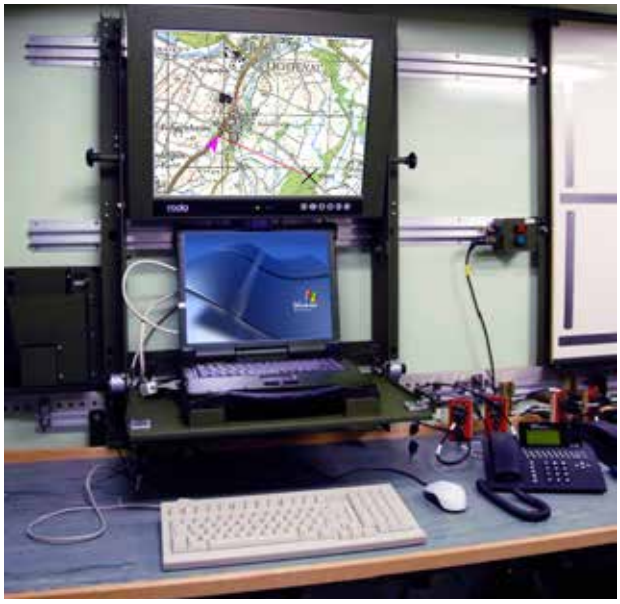
Your displays need to keep up with modern computing power. We offer hi-res screens with up to 20 megapixel resolution and options like PIP functionality to run multiple programs simultaneously, infrared touch screens and programmable hotkeys.

Plays well with others

The RD displays are compatible with most equipment thanks to their wide range of input and output options and flexible mounting solutions. They also have a long "form, fit, and function" period so you don't have to worry about upgrading any time soon. And no matter how long your displays are in use, you can count on efficient service as we offer lifetime support.

Endless customization options

We specialize in customizing our displays to your needs. Creating you own unique solution is a quick process with rapid prototyping and a short time to production. These projects usually include customized mounting systems, selecting functionality from our wide range of options and tailoring in- and outputs.



Operational advantages that give you an edge

- Wide storage and operating temperature ranges
- Optional infrared touch screen
- Night vision (NVIS) compatible
- PIP functionality
- Invisible Mode automatically dims backlight in stealth situations
- Wide range of in- and outputs including DVI, USB, composite, serial port, resistive touchscreen, etc.
- On side service available in many countries
- All MilDef computers can be remote controlled by RD displays over a distance up to 5m
- Designed, developed, produced and maintained according to ISO 9001 and AQAP standard
- Built according to MIL-STD-810, MIL-STD-461 and Ingress Protection standards

Armoured vehicle displays

The RD10 and RD15 resist the punishment of the road with rugged metal housings designed specifically for use in armoured vehicles. They are multi-functional with features like NVIS, PIP and Invisible Mode. And custom mounting systems are available for smooth integration with your equipment.

The RD10 enhanced temperature range has been designed according to the GVA standard for use inside armoured vehicles. With the enhanced temperature range operations even within the harshest environmental conditions are possible. The high brightness display and the keyboard with backlight allow easy use in bright and dark surroundings. The connectors can be customized according to the specific requirements.

RD10

Specifications:
XGA 1024 × 768, typ. 500 cd/m² , 400:1 contrast
Invisible Mode (wire), NVIS, PIP, Heater, Speaker, F1 - F13 keys
Key backlight, USB hub, Touch screen, Remote ON/OFF
(with DP-DVI), Built In Vehicle adapter 18-32V

Compliant to: MIL-STD-810F, IP65, MIL-STD-461E
Temp operating: -32 to +55°C
Temp storage: -46 to +70 °C
Dimensions: 293 × 62 × 235 mm (W × D × H)
Weight: ca. 3 kg

Connections on back:
1 × Earth stud M8
1 × MIL DC Power Jack 18-32V
1 × MIL Composite Video In, RS232
1 × MIL DP-DVI
1 × MIL VGA (RGB)
2 × MIL USB 1.1

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
Nightvision
Stealthmode

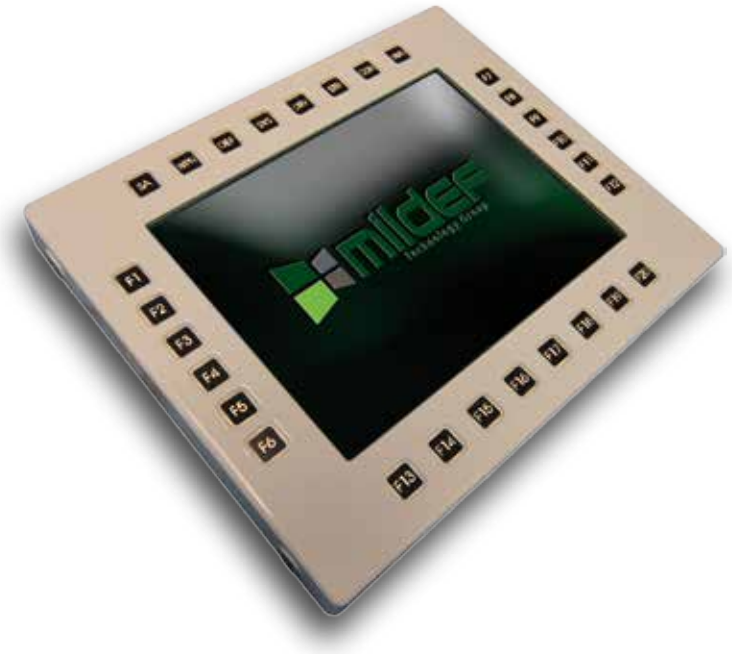
RD10 enhanced temperature range

Specifications:
XGA 1024 × 768, typ. 1000cd/m², LED backlight, 1200:1 contrast,
keys according to GVA: F1-F20 + additional functional area
selection buttons, keyboard backlight 12 - 24V DC-In

Compliant to: MIL-STD-810F, IP65, MIL-STD-461F
Temp operating: -46 to +60 °C
Temp storage: -46 to 71 °C
Dimensions: 305 × 29 × 252 mm (W × D × H)
Weight approx. 2.1 kg (without customized connectors)

Connections on back:
Internal: VGA, DVI, S-Video, Component Video, HDMI, USB,
DC-In (12 - 24V)
External: Customizable

Options and accessories:
Touch screen
Customized connectors
Connecting cables
AC/DC adapter
Stylus pen



RD15 B

Specifications:
XGA 1024 × 768, typ. 300 cd/m²
1000:1 contrast, Invisible Mode (wire and manual), NVIS, Speaker, F1 – F8 keys, Key backlight, USB hub, Mouse stick with Left/Right mouse buttons, Touch screen, Remote ON/OFF (with DP-DVI or Combo cable)

Compliant to: MIL-STD-810F, IP65 (front), MIL-STD-461E, VG95373, EN61000-4-2, EN61000-4-3
Temp operating: -31 to +63°C
Temp storage: -40 to +85°C
Dimensions: 351 × 57 × 300 mm (W × D × H)
Weight: ca. 3.6 kg

Connections on back:
1 × Earth stud M8
1 × MIL DC Power Jack 19V
1 × Combo Port
1 × DP-DVI
1 × VGA(RGB)
2 × USB 2.0 Back
1 × USB 2.0 Front

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
MIL connectors

RD15 MIL PiP

Specifications:
XGA 1024 x 768, typ. 280cd/m²
700:1 contrast, Invisible Mode (wire), NVIS, PiP, Heater, Speaker, F1-F8 keys, key backlight, USB hub, Touch screen, Remote ON/OFF (with DP-DVI), Mouse stick with Left/Right mouse buttons, Built In Vehicle adapter 18-32V

Compliant to: MIL-STD+810G, IP64, MIL-STD-461E
Temp operating: -31 to +61°C
Temp storage: -40 to +80°C
Dimensions: 351 × 63 × 300 mm (W × D × H)
Weight: ca. 4.2 kg

Connections on back:
1 × Earth stud M8
1 × MIL DC Power Jack 18-32V
1 × MIL Composite Video In, RS232
1 × MIL DP-DVI
1 × MIL VGA (RGB)
2 × MIL USB 1.1

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen

Command centre displays

Optimize control of your command centre communications with the hi-res RD19 and RD40. They are fully ruggedized with an IP65 rating and can be equipped with a heater for operations down to -20° C. They also come with options like PIP, touch screen functionality and remote control to give you an operational edge. Available mounting solutions also allow the use in tactical vehicles.

RD19

Specifications:
SXGA 1280 × 1024, typ. 350 cd/m²
1000:1 contrast, Invisible Mode (wire), USB hub, Heater,
Remote ON/OFF (with DP-DVI)

Compliant to: MIL-STD-810F, IP65 (front),
MIL-STD-461F, VG96916 T5, CE
Built In Vehicle adapter 18-32V
Temp operating: -20 to +55 °C
Temp storage: -40 to +60 °C
Dimensions: 480 × 77.5 × 405 mm (W × D × H)
Weight: ca. 10.7 kg

Connections on back:
1 × Earth stud M8
1 × MIL DC Power Jack 18 - 32V
1 × DP-DVI
1 × VGA (RGB)
1 × MIL Invisible Mode
2 × MIL USB 2.0
1 × Circuit Breaker

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
Touch screen
EMI glass and qualification

RD40

Specifications:
HD1080 1920 × 1080, typ. 700 cd/m²
1000:1 contrast, Invisible Mode (wire), USB hub, Heater,
Remote ON/OFF (with DP-DVI), Built In Vehicle adapter 18-32V

Designed to meet: MIL-STD-810G, IP54, MIL-STD-461E,
VG96916 T5, CE
Temp operating: 0 to +40 °C (-20°C with heater)
Temp storage: -20 to +60 °C
Dimensions: 1009 × 120 × 617 mm (W × D × H)
Weight: ca. 40 kg

Connections on back:
1 × Earth stud M8
1 × MIL DC Power Jack 18 - 32V
1 × MIL DP-DVI
1 × MIL VGA (RGB)
1 × MIL Invisible Mode
2 × MIL USB 2.0
1 × Circuit Breaker

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
Touch screen
PIP
Pedestal

Ruggedized multi-monitoring system

The high resolution electronic large-screen (HEL) display is the ideal solution for conveying mission critical data in a command post or situation room. It gives you up to 20 megapixel resolution and powerful split graphics computing so you can connect multiple sources for real time viewing.

Highly mobile with demountable parts, the HEL 2.1 display is tough enough to withstand harsh environments where dust, humidity and vibrations are ever present.

The HEL 2.1 is available in both 3×3 and 4×4 versions. During ISAF mission some HELs were in duty 24/7 for mission planing and situation report.

HEL 2.1

Specifications:
3×3: 3840 × 3072, 4×4: 5120 × 4096, typ. 600 cd/m²
2000:1 contrast, heater, Split server with XEON EM64T 3.73GHz processor, 2GB RAM, 2 × HDD Raid I, Built In Vehicle adapter 18–32V (monitor bar)
Windows 7 and 8 ready

Compliant to: MIL-STD-810F, IP54, EN61000-4-2
Temp operating: 0 to +40 °C,
Temp storage: -20 to +65 °C
Dimensions: 1720.5 × 124 × 329 mm (W × D × H)
Weight: ca. 50 kg (one 4×4 monitor bar)
1000 × 500 × 700 mm (W × D × H)
Weight: ca. 77.5 kg (Split server)

Connections on back (monitor bar):
1 × DC-In 18–32V
2 × serial OSD
1 × Heater
1 × VGA

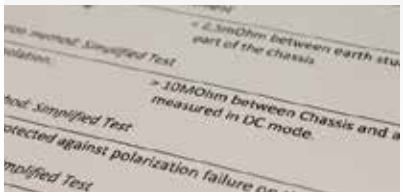
Ports and connections (Split server):
1 × DC-In
4 × USB 2.0
2 × RJ45 Ethernet
8 × BNC Composite Video
2 × OSD
4 × VGA (RGB) Input
4 × VGA (RGB) Output
4 × Heater
1 × IR-Touch screen

Options and accessories:
IR-Touch screen
Transport and storage boxes

Custom built solutions

MilDef Design House
MilDef offers its customers complete realisation of their product ideas or concepts. This is achieved by experienced and well-motivated personnel, who have a clear understanding of what is required to convert a customer's idea into a finished product. MilDef focuses on cost, quality and time for both high and low volume products and solutions.

From concept to creation



Specification

Upon receipt of a customer order a development specification is produced. This specification will ensure that both MilDef and the customer have a common understanding of the required deliverables. The agreed specification is also the key document on commencement of a detailed design. The development specification is the backbone of the project and will be referred to and reviewed throughout the R&D process.

Design

After the development specification has been approved by the customer, the detailed design work may commence for the mechanical, electronic and software elements. All drawings, layouts, and specifications needed to produce the prototype are prepared in-house with the support of the latest available systems, such as 3D CAD and PCB layout. Potential design solutions are continuously evaluated with a practice of "Upstream Design" ensuring that MilDef prototypes are in accordance with customer expectations.

Suppliers

MilDef works with both local sub-contractors and global vendors. Key suppliers include CNC (Computer Numerical Control) service suppliers, who machine chassis from single billets of aluminium, SMA (Surface Mounted Assembly) suppliers, conducting the assembly of PCBs and selected vendors, supplying inter-connectivity solutions especially developed for the defence industry.

Designing the solutions of the future

Not every challenge has an off-the-shelf solution. Many of the innovations forces around the world rely on today started out as customization initiatives. Whether it's a few tailored products or hundreds of units, MilDef can help convert a concept for a better solution into reality with speed and efficiency.

Such projects generally involve modifying computers and connectors, designing a space-saving setup and enhancing units with a huge range of accessories. MilDef are also capable of integrating data security solutions and tempest requirements. Every new unit is tested in an EMI chamber to ensure it meets all the required standards.

Innovation at work

Thousands of MilDef solutions are in operation around the world. The German Army is using 2,500 customized Rocky and Panther units in their FüInfoSys Heer battle management system. Airbus in France have equipping all of their A400 military transporters with portable maintenance access terminals (PMATs) built from Rocky III and RK886s. And MilDef recently helped the Norwegian Armed Forces create a compact and mobile communication solution using 19"/2 units for their CV90's.

To help the Norwegian Armed Forces take control of the sprawling equipment in their CV90's, we created a compact solution based on 19"/2 units. The solution houses all critical tech like computers, switches, UPS, etc. in one mobile unit.

Prototype builds

Once suppliers have delivered the parts to MilDef requirements, these are processed through the R&D lab and prototypes are built. The prototypes are always assembled in co-operation between the R&D engineers and production personnel. This practice is conducted to ensure that a volume production perspective is gleaned from an early phase.

Prototype Verification and Validation

MilDef has its own test standard called the MilDef Verification Handbook which details the minimal tests that are will carried out on all prototypes. After prototype assembly, verification and validation consists of functional, environmental and EMC tests, allied with inspection activities (more extensive testing can be provided on request).

Test Certificate

All tests and inspection activities that are conducted when verifying and validating prototypes are referenced from the requirements laid down in the development specifications.

After verification and validation, a report will be issued proving compliance with the development specification and customer expectations.

Finished Product

For short production runs or custom solutions, MilDef deliver the customer requirement after the prototype has been successfully verified and validated.

For volume products to be built by MilDef the development will continue until the item is verified for serial production.

Enhancing military communication

141003 • v3

MilDef is an international company at the forefront of designing, developing and manufacturing combat-rugged computers and special electronics for communication in extreme environments where reliability, robustness and high performance are crucial.

Our offer includes a battle-field 19”/2® standard military form factor that saves significant space and enables more functionality, customized communication units of this form factor, and special electronics based on your own specifications and dedicated to your particular needs.

We also supply the MilDef Crete range of communication products, including notebooks, tablets and PDAs. Our equipment complies with IP54, IP65, MIL-STD-810 and MIL-STD-461. We are certified according to ISO 9001:2008 regarding design, development and production. Naturally, we provide all the service required for individual units and provide them with lifetime support. Our environmental programme is guided by our ISO 14001:2004 certification.

In close cooperation with you, MilDef is dedicated to reshaping your communication power.

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